Data sheet

UR-DS Series

FASTUS IO-Link Hub

Temperature RTD, 8-input

UR-DS8RTD

■ General specifications

Item		Specifications
Unit		IO-Link Hub Temperature RTD
Model		UR-DS8RTD
Power supply voltage		24 VDC ±15%*1
Current consumption		Max. 50 mA (At 24 VDC)
Operating temperature		0 to +55 °C (no freezing)
Operating humidity		5 to 95% RH (no condensation)
Storage temperature		-25 to +75 °C (no freezing)
Storage humidity		5 to 95% RH (no condensation)
Vibration resistance		IEC 61131-2 compliant Vibration frequency: 5 to 8.4 Hz, single amplitude: 3.5 mm Vibration frequency: 8.4 to 150 Hz, constant acceleration: 10 m/s² (1.0 G)
Shock resistance		IEC 61131-2 compliant Peak acceleration: 150 m/s² (15G) 3 times each in X, Y, Z 3 directions (18 times total)
Atmosphere		No corrosive gas
Operating altitude		0 to 2,000 m
Installation location		In door use
Degree of protection		IP20
Measurement category		II or lower
Pollution degree		2 or lower
Applicable regulations	EMC	EMC Directive (2014/30/EU)
	Environment	RoHS Directive (2011/65/EU), China RoHS (Regulation 32)
Applicable standard		EN 61131-2
Compatible DIN rail		TH35-7.5Fe, TH35-7.5Al
Cable length		Max. 20 m (between IO-Link Master and IO-Link Hub)
Compatible wire		Power terminal block: AWG 24 to 12 Platinum resistance thermometer input terminal block: AWG 24 to 18
Material		Unit: PC; DIN rail mounting hook: POM; Terminal block: PA
Weight		Approx. 115 g (including terminal blocks, when not wired)
Included accessories		Instruction manual

*1 : Use a Class 2 power supply or a power supply compliant with SELV (Safety Extra-Low Voltage) circuit and LIM (Limited Energy Circuit) circuit standards.

■ IO-Link specifications

Item	Specifications
Host communication interface	IO-Link (operates as device)
Process input data byte count	16 bytes
Process output data byte count	1 byte
Minimum cycle time	1.2 ms
IO-Link revision	1.1.3
Communication speed	COM3 (230.4 kbps)/ COM2 (38.4 kbps) Switching by service data (Default value: COM3)
Communication function operation power supply	IO-Link power supply

<MEMO>

・Instead of ”Application Reset”, the device offers "Restore factory settings".

・The device is developed with older software assets, therefore the device uses TYPE_0 in Preoperate.

・AccessLocks/@dataStorage is implemented.

・Common Profile is not supported due to insufficient memory capacity.

■ Input specifications of platinum resistance thermometer

Item	Specifications
Number of Input channels	8 channels
Compatible resistance thermometer	Pt100, 3-wire type
Maximum input current	Approx. 1 mA (When measured at 25 °C)
Measurement range	-200 to +1,000 °C
Accuracy	-200 to -60 °C: ±1.0 °C -60 to +300 °C: ±0.3 °C +300 to +600 °C: ±1.0 °C +600 to +1,000 °C: ±2.0 °C (at ambient temperature of 25 °C)
Temperature characteristics	±50 ppm/°C (Within the ambient temperature range)
Resolution	16 bits
Dielectric withstand voltage	500 VAC for one minute between platinum resistance thermometer input terminal batch and IO-Link batch.
Insulation resistance	10 Mega ohm between platinum resistance thermometer input terminal and IO-Link terminals at 500 VDC
Inter-channel isolation	None (common)
Insulation method	Photocoupler, transformer insulation
Sampling cycle	2 ms